

ABSTRACT OF THE DISCLOSURE

In order to realize a magnetic resistance device having a high magnetic resistance change rate, satisfactory production yield and a low level of variation in production, a pair of magnetic tunnel resistance devices 2 employing a laminated structure comprised of antiferromagnetic film 8, lower magnetic layer 9, barrier film 10 and upper magnetic layer 11 are independently and separately formed by ion beam etching on a lower electrode 3 and in common with said lower electrode 3 provided on a substrate 5. A pair of independent upper electrodes 4 are formed on upper magnetic layer 11. As a result, a pair of magnetic tunnel resistance devices 2 are formed connected in series on substrate 5.